Serial No. 09/497,800   15
Docket No. YOR920000202US1
(YOR.094)

REMARKS

Claims 1, 4-7, 9-19, and 21-37 are all the claims presently pending in the application.

Applicants gratefully acknowledge that **claims 1, 4-7, 9-17, 33, and 34** would be **allowable** if amended in accordance with the Examiner's suggestions, and the objections to the specification are overcome.

While Applicants believe that all of the claims are patentable over the cited references, to speed prosecution, allowable claims 1, 4-7, 9-16, 33, and 34 have been amended in accordance with the Examiner's suggestions for placing claims 1, 4-7, 9-17, 33, and 34 in condition for allowance.

Claims 26-32, 36, and 37 are withdrawn from consideration as being directed to non-elected species of the invention.

While Applicants believe that all of the claims are clear and definite, to speed prosecution, the claims have been amended to define more clearly the features of the claims invention, thereby overcoming the rejection under 35 U.S.C. § 112, second paragraph, set forth below.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicants specifically state that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1, 4-7, 9-17, 22, 25, 33, and 34 stand rejected under 35 U.S.C. § 112, second paragraph.

Serial No. 09/497,800   16
Docket No. YOR920000202US1
(YOR.094)

Claims 18, 19, 21-25, and 35 stand rejected under U.S.C. § 102(e) as being anticipated by

Fong (U.S. Patent No. 6,279,015).

These rejections are respectfully traversed in the following discussion.

I.   THE CLAIMED INVENTION

The claimed invention is directed to a method of reconciling component variables with

container variables in a document.

In conventional document assembly systems, importation of document components is

typically based on fixed criteria which presents problems for complex documents. For example,

a particular clause may be reused throughout a document, and it may be integrated within a

larger assembly of document components which is referred to as a "container" or "container

assembly". There must be links between the container assembly and the document component

being imported during document assembly, and both items may contain variables which may

refer to the same domain concepts (e.g., see specification at page 3, line 20 to page 4, line 5).

However, maintaining consistency between theses variables once the document

component (source component) has been imported presents problems unless these variables

representing the same concepts are somehow linked to one another. Hitherto the present

invention, such a solution has not been provided and hence these problems have been prevalent

(e.g., see specification at page 4, lines 6-10).

Instead, with the conventional systems and methods, there are simply container variables

and components (e.g., see specification at page 5, lines 9-10).

In conventional systems, the component (independent of its content) that structures the

variables together is not independent of the value assignment. As a result, no manual linking of

Serial No. 09/497,800   17
Docket No. YOR920000202US1
(YOR.094)

these concepts is provided, and thus there is minimal (if any) flexibility and/or reusability of the components since the components are <u>not</u> generally applicable or generic (e.g., see specification at page 6, lines 1-5).

Further, there may be several different components in the document that all refer to the same concepts (e.g., the company's address is repeated in different places throughout the document). However, since in conventional systems the variables in the different components are <u>not</u> linked, <u>if the company's address is changed in one location, it will not be updated elsewhere.</u> This is a serious maintenance problem that would be fatal to a system that relies heavily on component-based drafting (e.g., see specification at page 6, lines 6-12).

In the claimed invention, on the other hand, there are three concepts which are considered, including the <u>position in the document</u> where the component goes, the <u>component</u> itself that plugs in and out of the position in the document, and the <u>particular domain model information</u> which plugs into the component. The novel and unobvious reconciler of the claimed invention allows a manual linking of these concepts, thereby allowing <u>greater flexibility</u> and <u>greater reusability</u> of the components because the components are more generally applicable (e.g., see specification at page 9, lines 11-18).

Thus, with the unique and unobvious features of the claimed invention, the user can <u>reduce its database requirements, increase flexibility and reusability</u> in that, for any given document component, the document component can be applied more generically to increase its reusability (e.g., more generically reusable). The user also can determine the linkages and leverage loose coupling of the domain knowledge and document knowledge. Further, the invention allows reconciliation to be performed <u>interactively</u> by the user (e.g., see specification at page 9, line 19, to page 10, line 3).

Serial No. 09/497,800   18
Docket No. YOR920000202US1
(YOR.094)

II.   THE 35 U.S.C. §112 REJECTIONS

A.   Claims 1, 4-7, 9-17, 22, 25, 33, and 34 stand rejected under 35 U.S.C. § 112,

second paragraph.

Applicants appreciate the Examiner's helpful suggestions for amending the claims.

While Applicants believe that the claims would be clear and definite to the ordinarily

skilled artisan, to speed prosecution, Applicants have amended the claims in accordance with the

Examiner's suggestions.

Therefore, the Examiner respectfully is requested to withdraw this rejection of claims 1,

4-7, 9-17, 22, 25, 33, and 34.

Applicants note that, with respect to claims 22 and 25, the Examiner erroneously states

that neither the specification nor the previous claims mentions "*swapping*" or "*built*", as recited

in claims 22 and 25. However, contrary to the Examiner's position, these features and claim

terms clearly are recited either in the "original" claims and/or in the specification (e.g., see

original claims 22 and 25; see also specification at page 8, lines 12-13; page 9, lines 4-7), and

thus, clearly are mentioned in the original disclosure.

As mentioned above, to speed prosecution, Applicants have amended claims 22 and 25 to

overcome this rejection.

III.   THE PRIOR ART REJECTION

Claims 18, 19, 21-25, and 35 stand rejected under U.S.C. § 102(e) as being anticipated by

Fong (U.S. Patent No. 6,279,015). Applicants respectfully traverse this rejection, for at least the

following reasons.

Serial No. 09/497,800   19
Docket No. YOR920000202US1
(YOR.094)

First, Applicant notes that the Examiner merely has cited all of the Figures (i.e., 1-20)

and all of the disclosure (i.e., column 1, line 1 through column 44, line 19) of the Fong reference.

That is, for each of claims 18, 19, 21-25, and 35, the Examiner cites the entire Fong

reference in support of his position (e.g., see Office Action at page 12, lines 16-17; page 13, lines

1-2, lines 6-7, lines 11-12, and 17-18; page 14, lines 3-4, line 10, lines 16-17, and lines 20-21;

and page 15, line 6, line 13, and line 19; page 16, lines 9-10, and line 20, and page 17, line 1).

Thus, the Examiner, in effect, is asserting that the claimed invention is "clearly

anticipated" by Fong. Applicants submit, however, that it is not apparent from reading the entire

disclosure of Fong (i.e., Figures 1-20 and column 1-44) which portions of the Fong reference the

Examiner has deemed to "anticipate" the respective elements of the claimed invention.

Applicants respectfully submit that, by citing the entire disclosure of Fong for each of the

elements of claims 18, 19, 21-25, and 35, the Examiner clearly has failed to establish a *prima*

facie case of anticipation with respect to these claims.

Hence, Applicants cannot properly respond to the Examiner's position, since it is unclear

what portions of Fong the Examiner believes anticipate each and every element of the claimed

invention.

Thus, should the Examiner maintain this rejection, Applicants respectfully request that

the Examiner properly identify which portions of Fong allegedly disclose or suggest each and

every element of the claimed invention, as recited in claims 18, 19, 21-25, and 35.

In view of the foregoing, Applicants respectfully submit that the Examiner has not

established a *prima facie* case of anticipation with respect to claims 18, 19, 21-25, and 35.

Serial No. 09/497,800   20
Docket No. YOR920000202US1
(YOR.094)

Applicants reserve the right to traverse this rejection at such time that the Examiner

properly identifies the features of the Fong reference which are deemed to anticipate the claimed

invention (i.e., at such time that a *prima facie* case of anticipation properly is established).

Second, notwithstanding the above, Applicants submit that Fong does not disclose or

suggest all of the features of the claimed invention.

For example, independent claim 18 recites a computer-implemented method of

interactively reconciling component variables with container variables in a document, including:

> *displaying a component variable next to a representation of an*
> *element in a domain model of the document;*
> *identifying an association between the component variable and*
> *said element in the domain model; and*
> *matching said element of said domain model interactively by a*
> *user* (emphasis added).

On the other hand, independent claim 19 recites a system for reconciling component

variables with container variables in a document relative to a domain model, including:

> *a container including a plurality of container variables;*
> *a component including a plurality of component variables in said*
> *document; and*
> *a reconciler that maps container variables in said container with*
> *component variables in said component,*
> *wherein said reconciler is manually controlled by a user to*
> *perform a mapping* (emphasis added).

Further, independent claim 35 recites a system for reconciling component variables with

container variables in a document, including:

> *means for identifying a component variable;*
> *means for determining if there is a container variable in a*
> *container that refers to a same domain concept as the identified*
> *component variable;*

> *if a container variable is determined to refer to the same domain
> concept as the identified component variable, means for associating said
> component variable with said container variable;*
>
> *if no container is determined to refer to the same domain concept
> as the identified component variable, means for associating said identified
> component variable with an element in a domain model of the document
> having a best identity match; and*
>
> *means for displaying the association between said identified
> component variable and said container variable or said domain model
> element to a user,*
>
> *wherein said user either accepts or overrides said association*
> (emphasis added).

Applicants submit that a *"domain model"* is a partially specified object model describing

the concepts, their properties and relationships in the domain that a document is about. The

values of properties may be references to other objects in the domain model.

On the other hand, the association or link expressions define a path in the domain model.

This path ultimately lands at a domain model element.

For example, "The Company.CEO.Name" would define a path denoting the name of the

CEO of "The Company". The document model is also an object model, but different from the

domain model, in that it describes the component parts of the document (e.g., the introduction,

the customer information, the customers responsibilities, the deliverables, etc.).

A container variable holds a reference to a component in the document model. For

example, the Customer Information Section might be a container variable. It is intended to hold

a document component that describes the customer. On the other hand, an association or link

expression allows a container variable to be mapped to a domain model element.

Applicants note that making the mapping according to the claimed invention generally is

an easy process. A container variable, which denotes some part of the document model, is

Serial No. 09/497,800   22
Docket No. YOR920000202US1
(YOR.094)

associated with a link expression (which denotes some object in the domain model). This can be

done programmatically or through a GUI.

The mapping may assert, for example, that the Customer Information Section of the

document be associated with the "thecompany.ceo" domain model element. As such, the system

can then choose to render the information in the domain model element in a document model

element that is a valid filler for the Customer Information Section.

Applicants emphasize that, according to an exemplary aspect of the present invention,

there are three distinct structures:

1) The Domain Model describing the domain independently of any

particular document structure and independently of any written description or

rendering;

2) The Document Model describing the structure of a particular document.

Each part ultimately represented by a container variable; and

3) Document Components, which are written and formatted language

(with content variables) that can fill the container variables representing parts of a

document model.

Applicants submit that associations or link expressions allow the user to drill down and

identify elements in the domain model and link them to container variables in the document

model, thereby indicating what content should be used to instantiate a document component that

would fill the container variable.

Thus, according to the claimed invention, it is easy to assert the mappings. Moreover, the

mappings can be overridden.

Serial No. 09/497,800   23
Docket No. YOR920000202US1
(YOR.094)

As an example, in a case where the system may instantiate a customer description

document component with the CEO's personal information and insert that in the Customer

Information container variable, the user (or another system) may override this and, while keeping

the customer description document component, instead link it to the company's founder (e.g.,

"thecompany.founder").

In view of the foregoing, Applicants submit that Fong clearly does not disclose or suggest

all of the features of the claimed invention. Therefore, the Examiner is respectfully requested to

reconsider and withdraw this rejection.

The Examiner respectfully is requested to reconsider and withdraw the rejection of these

claims, or alternatively, properly establish a *prima facie* case of anticipation of claims 18, 19, 21-

25, and 35,

IV.   REQUEST FOR REJOINDER OF NON-ELECTED CLAIMS

Applicants respectfully request that the Examiner rejoin non-elected claims 26-32, 36,

and 37, which were withdrawn from consideration as being directed to non-elected species of the

invention, and permit these claims to pass to allowance for somewhat similar reasons as those set

forth above.

V.   FORMALITIES

A.   Objections to Specification

The Office Action objects to the specification as allegedly failing to provide antecedent

basis for some of the features of claims 1, 3, 22, and 25, since the specification allegedly fails to

mention these terms and phrases.

Serial No. 09/497,800   24
Docket No. YOR920000202US1
(YOR.094)

Applicants reiterate that the features and claim terms which are identified by the Examiner clearly <u>are</u> recited either in the "original" claims <u>and/or</u> in the specification (e.g., see original claims 1, 3, 22, and 25; see also specification at page 8, lines 12-13; page 9, lines 4-7), and thus, clearly <u>are</u> part of the original disclosure. Thus, by definition, the original disclosure provides antecedent basis for these claim terms (e.g., see M.P.E.P. § 608.01(o)), since these claim terms were not added by amendments to the claims.

In the previous Amendment, Applicants incorporated the features recited in the <u>original</u> claims (i.e., which are part of the original disclosure) into the "Summary of the Invention" section of the specification.

While Applicants submit that the ordinarily skilled artisan would know and understand the ordinary meaning of these terms in the context of the specification, drawings, original claims, and the state of the art, <u>to speed prosecution</u>, Applicants have amended the specification and claims 22 and 25 to obviate this objection.

Thus, the Examiner is requested to reconsider and withdraw this objection.

The Examiner also objects to the specification at page 13, lines 12-14, and page 13, lines 20-22, and suggests amending these sentences to read more clearly. However, Applicants respectfully submit that it is <u>not</u> clear why the Examiner has deemed these sentences to be unclear, or why the Examiner proposes deleting portions of these sentences. Applicants submit that the subject sentences would be understandable to the ordinarily skilled artisan, as written.

However, <u>to speed prosecution</u>, the specification is amended merely to clarify these sentences (e.g., by setting off portions of the sentences using parentheses), somewhat in accordance with the Examiner's suggestion.

Thus, the Examiner is requested to reconsider and withdraw these objections.

Serial No. 09/497,800   25
Docket No. YOR920000202US1
(YOR.094)

B.   Objections to Drawings

The Office Action also maintains the objection to claim 18, lines 3-4. Applicants

reiterate that the claimed features are illustrated, for example, in Figures 3-5 of the present

invention.

That is, with reference to Figures 3-5, the specification clearly discloses that users may

interactively alter the mappings (e.g., as shown by the connecter 14) provided by an automated

algorithm to achieve a more precise linkage between source document component variables A,

B, and C of 12 and the elements 1, 3, and 5 of the domain model of the container assembly 11.

The occurrences of variables A, B, and C within the text of the source component are

now occurrences of variables 1, 3 and 5 of the container assembly 11. Thus, a linking (e.g.,

associating) has been performed by the connector 14, to increase the reusability and flexibility of

the variables. Along these lines, as shown in Figure 5, when a component importation operation

is initiated in an interactive reconciliation mode *"the system will produce mappings in connector*

14 and output these to the user via a graphical user interface (GUI) 55" (e.g., see specification at

page 16, lines 14-17).

The specification clearly discloses that the user may then edit the mappings in connector

14 overriding the system generated mapping. Once editing of the system generated mapping is

completed, component importation is continued using the edited mappings shown in connector

14.

Particularly, the specification discloses that, in one exemplary implementation (e.g.,

Figure 5, GUI 55), the identifying is performed interactively by the user by the system displaying

component variables and their link expressions next to a representation of elements of the

Serial No. 09/497,800   26
Docket No. YOR920000202US1
(YOR.094)

domain model, as shown in Figure 5. The user then makes the linking (e.g., associations) by

clicking on (actuating via input device) the appropriate variable(s) in the components and

matching the variable(s) to an element of the containing document's domain model. Each

variable in the component may be matched, but need not be depending upon the user's desires

(e.g., see specification at page 16, lines 20-22, and page 17, lines 1-5).

Along these lines, the user can select either the imported component value or the

containing document's variable as the value which is to be used. Thus, the variable(s) is/are

allowed to attach to components. Hence, the user by using a graphic user interface (GUI) 55 of

Figure 5, identifies the associations between the component variable and a domain model

element (e.g., see specification at page 17, lines 6-10).

Clearly, one of ordinary skill in the art would know and understand that Figure 5

illustrates one possible GUI of the system displaying component variables (e.g., A, B, C) and

their link expressions (e.g., A→1; B→3; C→5) next to a representation of elements (e.g., 1, 3, 5)

of the domain model, as shown in Figure 5.

Applicants note that the arrow extending from the GUI 55 display screen to the document

component 12, connector 14, and container assembly 11, exemplarily illustrate one possible

display of these claimed elements on the display of the GUI 55, as would be understood by the

ordinarily skilled artisan. Applicants note that displaying component variables (e.g., A, B, C)

and their link expressions (e.g., A→1; B→3; C→5) next to a representation of elements (e.g., 1,

3, 5) of the domain model on the screen of a GUI clearly would be understandable to the

ordinarily skilled artisan in view of the written disclosure of the same in the specification, and

further in view of the exemplary embodiments illustrated by the GUI in Figure 5.

Serial No. 09/497,800   27
Docket No. YOR920000202US1
(YOR.094)

For the foregoing reasons, the Examiner is requested to reconsider and withdraw the

objection to the drawings.

C.   Objections to Claims

The Examiner objects to claims 14 and 17. Applicants' respectfully submit that claims

14 and 17 have been amended to obviate these objections.

Accordingly, the Examiner is requested to reconsider and withdraw the objections to

claims 14 and 17.

VI.   CONCLUSION

In view of the foregoing, Applicant submits that claims 1, 4-7, 9-19, and 21-37, all the

claims presently pending in the application, are patentably distinct over the prior art of record

and are in condition for allowance. The Examiner is respectfully requested to pass the above

application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the

Examiner is requested to contact the undersigned at the local telephone number listed below to

discuss any other changes deemed necessary in a telephonic or personal interview.

Serial No. 09/497,800   28
Docket No. YOR920000202US1
(YOR.094)

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any

overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

Date: JANUARY 23, 2006

John J. Dresch
Registration No. 46,672

Sean M. McGinn, Esq.
Registration No. 34,386

**MCGINN INTELLECTUAL PROPERTY
   LAW GROUP, PLLC**
8321 Old Courthouse Road, Suite 200
Vienna, Virginia 22182-3817
(703) 761-4100
Customer No. 21254

CERTIFICATE OF TRANSMISSION

I certify that I transmitted via facsimile to (571) 273-8300 the enclosed Amendment under 37 C.F.R. § 1.111 to Examiner William D. Hutton, Jr., Art Unit 2176, on January 23, 2006.

John J. Dresch, Esq.
Registration No. 46,672